

WHAT IS CLAIMED IS:

1. A method of treating a patient with a disease or pathologic condition associated with G-protein receptor kinase activity where the G-protein receptor kinase activity would otherwise cause desensitization of a receptor controlling said disease or condition, said method comprising the step of administering nitric oxide donor that donates nitric oxide or a related redox species and provides bioactivity that is identified with nitric oxide to inhibit the G-protein receptor kinase activity thereby sensitizing or preventing desensitization of said receptor.
2. The method of Claim 1 where said NO donor is S-nitrosoglutathione.
3. The method of Claim 1 where the receptor is a  $\beta$ -adrenergic receptor.
4. The method of Claim 3 where the disease or condition is heart failure.
5. The method of Claim 4 where the NO donor is S-nitrosoglutathione and the S-nitrosoglutathione administration causes increase in heart pumping and also stimulates growth of heart muscle.
6. The method of Claim 5 where the S-nitrosoglutathione is administered in conjunction with administration of a therapeutically effective amount of isoproterenol.
7. The method of Claim 3 where the disease or condition is where the patient is connected to a heart assist device awaiting heart transplant.
8. The method of Claim 7 where the NO donor is S-nitrosoglutathione.
9. The method of Claim 3 where the disease or condition is where the patient has had heart surgery and otherwise cannot be disconnected from heart pump without loss of heart function.
10. The method of Claim 9 where the NO donor is S-nitrosoglutathione.
11. The method of Claim 1 where the patient is about to undergo surgery and is at high risk for a cardiac event.
12. The method of Claim 11 where the NO donor is S-nitrosoglutathione.
13. The method of Claim 1 where the receptor is the  $\mu$ -opioid receptor and the patient is being treated with or is addicted to an opiate.

14. The method of Claim 1 where the disease or condition is an inflammatory condition which is not asthma, and when the inflammatory condition is cystic fibrosis and the NO donor is one capable of acutely lowering FEV1 by more than 12%, the NO donor is administered in a therapeutically effective amount which is insufficient to acutely lower FEV1 by more than 12%.

15. The method of Claim 14 where the disease or condition is cystic fibrosis.

16. The method of Claim 14 where the disease or condition is rheumatoid arthritis.